# REVIEWS

## The Salton Sea*

The flooding of Salton Sink, in 1907, was the beginning of a problem that offered many attractions to botanists and a history of those investigations is contained in the volume now issued by the Carnegie Institution. The breaking of the banks of the Colorado and the consequent flooding of a region of about 450 square miles, the final control of the river and the gradual recession of the water by evaporation has made a condition that is perhaps unique in the world. Dr. MacDougal was quick to detect the unrivalled opportunity to study the revegetation of the banks of a slowly drying inland sea, and the thoroughness with which the undertaking has been carried on is evidenced by the list of articles in the accompanying footnote.

From the purely ecological and phytogeographical standpoint the contributions of Dr. Parish and Dr. MacDougal are the most interesting, but their work necessarily rests on the foundation erected by the other contributors to the volume. The description of the revegetation of the beaches, caused by the gradual drying up of the sea (nearly 10 square miles annually was thus added), and the discussion of the factors that played their part in the process, are the chief contributions of the volume. There are bound up with such studies great problems of general bearing, dealing with the behavior of plants under new and constantly

* MacDougal, D. T. and collaborators. The Salton Sea, a study of the geography, the geology, the floristics and the ecology of a desert basin. *182 pp. + 32 plates + 4 figures in the text.* Carnegie Institution of Washington Publication No. 193. 30 June, 1914. Containing: The Cahuilla Basin and desert of the Colorado, by W. P. Blake, *pp. 1–12;* Geographical features of the Cahuilla Basin, by G. Sykes, *pp. 13–20;* Sketch of the geology and soils of the Cahuilla Basin, by E. E. Free, *pp. 21–33;* Chemical Composition of the water of Salton Sea and its annual variation in concentration 1906–1911, by W. H. Ross, *pp. 35–46;* Variations in composition and concentration of water of Salton Sea, 1912 and 1913, by A. E. Vinson, *pp. 47–48;* Behavior of certain micro-organisms in brine, by G. J. Pierce, *pp. 49–70;* Action of Salton Sea water on Vegetable Tissue, by M. A. Brannon, *pp. 71–78;* The tufa deposits of the Salton Sink, by J. C. Jones, *pp. 79–84;* Plant ecology and floristics of Salton Sink, by S. B. Parish, *pp. 85–114;* Movements of vegetation due to submersion and desiccation of land areas in Salton Sink, and a General Discussion, both by D. T. MacDougal, *pp. 115–182.*

changing environmental conditions, and the effect of this behavior on the movement and association of species. From this standpoint the book is a notable addition to the literature of botany. Some, perhaps too carping, systematic botanists may quarrel with the publication of a new name for a species of *Chamaesyce*, without description, simply saying ined. n.sp. (p. 110). There has been, too, some carelessness in proof-reading, such as Geranaceae for Geraniaceae (p. 109) and Asclepiaceae for Asclepiadaceae (p. 175). But such trivial matters are lost sight of in the fact that the volume is a really splendid contribution to botanical literature.

The illustrations and maps are very fine, in many cases showing beautiful views of the region. The failure of the publication to contain an index must reduce its usefulness to many.

N. T.

## NEWS ITEMS

Dr. Arthur Harmount Graves has resigned his position as Assistant Professor of Botany in the Sheffield Scientific School of Yale University, and is at present engaged in research at the laboratory of Professor V. H. Blackman, Professor of Plant Physiology and Pathology, Royal College of Science, South Kensington, London, England. Dr. Graves has been a member of the faculty of Yale for the past twelve years.

The Long Island Historical Society has recently deposited with the Brooklyn Botanic Garden the herbarium of the Society. It consists of a general herbarium and a special collection of Long Island plants, many of which are from the collection of E. S. Miller.